

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION**

WRIGHT ASPHALT PRODUCTS CO.,
LLC,

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Plaintiff,

v.

§ CIVIL ACTION NO. H-09-1145
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PELICAN REFINING COMPANY, LLC,

Defendant.

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MEMORANDUM AND OPINION

This is a patent-infringement lawsuit. The parties, Wright Asphalt Products Company and Pelican Refining Company, compete in manufacturing and selling asphalt products. Wright owns two patents at issue in this case: U.S. Patent No. 5,397,818 (the ‘818 Patent) and U.S. Patent No. 5,492,561 (the ‘561 Patent). These patents describe processes for making certain modified asphalt products using recycled tire rubber. This lawsuit arises from Pelican’s manufacture and sale of modified asphalt products. Wright has alleged that Pelican’s actions literally infringed claims in the ‘818 and ‘561 Patents. Pelican has counterclaimed, alleging invalidity and unenforceability. Under *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996), this court in March 2011 entered a claim-construction opinion on disputed claim terms. (Docket Entry No. 58).¹ Since the *Markman* opinion, Pelican has moved for reconsideration of some of the disputed claim terms. Both Pelican and Wright have moved to exclude expert testimony the other has submitted. During a lengthy motion hearing on February 29, 2012, this court heard oral

¹See also *Wright Asphalt Prods. Co. v. Pelican Ref. Co.*, Civ. A. No. H-09-1145, 2011 WL 845917 (S.D. Tex. Mar. 7, 2011).

argument on each motion and ruled on many from the bench. (Docket Entry No. 119; *see also* Docket Entry No. 120). Four motions required further consideration and are addressed in this memorandum and opinion.

- (1) Wright has moved to exclude the expert testimony of Dr. Albert Karvelis and Eric Steffe. (Docket Entry No. 86). Pelican has responded, and Wright has replied. (Docket Entry Nos. 107, 112).
- (2) Pelican has moved to exclude the expert testimony of Dr. Gayle King. (Docket Entry No. 88). Wright has responded, and Pelican has replied. (Docket Entry Nos. 99, 110).
- (3) Pelican has moved for reconsideration of this court's construction of the disputed terms "middle portion" and "bottom portion" in the '561 Patent. (Docket Entry No. 94). Wright has responded, and Pelican has replied. (Docket Entry Nos. 103, 108).
- (4) Pelican has moved for reconsideration of this court's construction of the disputed term "jet spray nozzles" in the '561 Patent. (Docket Entry No. 95). Wright has responded, and Pelican has replied. (Docket Entry Nos. 103, 108).

After careful consideration of the motions, responses, and replies; the record, including this court's previous *Markman* opinion; the arguments of counsel; and the applicable law, this court rules as follows:

- Wright's motion to exclude the expert testimony of Dr. Karvelis and Steffe, (Docket Entry No. 86), is granted in part and denied in part. Dr. Karvelis may not provide technical-expert testimony at trial. Steffe may provide expert testimony at trial, but limited to Patent Office practices and procedures generally.
- Pelican's motion to exclude the expert testimony of Dr. King, (Docket Entry No. 88), is denied, but without prejudice to reassertion following a *Daubert* evidentiary hearing, scheduled for **August 6, 2012, at 8:30 a.m.**, in Courtroom 11-B.
- Pelican's motion for reconsideration of the terms "middle portion" and "bottom portion," (Docket Entry No. 94), is denied. The court adheres to its prior construction of those terms.

- Pelican’s motion for reconsideration of the term “jet spray nozzles,” (Docket Entry No. 95), is granted in part. As revised, the term is construed to mean: “devices or structures, submerged within the liquid mixture, with an aperture capable of providing a propulsion spray of the material passing through it.”

The reasons for these rulings are explained in detail below.

I. The Motions to Exclude Expert Testimony

A. The Applicable Law

Evidence is relevant if it “has any tendency to make a fact more or less probable than it would be without the evidence[.]” That fact must be “of consequence in determining the action.” FED. R. EVID. 401. A district court “may exclude relevant evidence if its probative value is substantially outweighed by a danger of one or more of the following: unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, or needlessly presenting cumulative evidence.” FED. R. EVID. 403. A witness qualified as an expert may give an opinion or other expert testimony if:

- (a) the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods;
- and (d) the expert has reliably applied the principles and methods to the facts of the case.

FED. R. EVID. 702. *See also Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 149 (1999); *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 597 (1993). “[C]ourts are charged with a ‘gatekeeping role,’ the objective of which is to ensure that expert testimony admitted into evidence is both reliable and relevant.” *Sundance, Inc. v. DeMonte Fabricating Ltd.*, 550 F.3d 1356, 1360 (Fed. Cir. 2008).

Technical experts routinely testify in patent-infringement cases. The Federal Circuit “has explained that only one of ordinary skill in the art who is qualified as a technical expert under Rule

702 of the Federal Rules of Evidence may offer expert testimony on technical matters.” *Byrne v. Wood, Herron & Evans, LLP*, 450 F. App’x 956, 962–63 (Fed. Cir. 2011) (citing *Sundance*, 550 F.3d at 1363). That is because “[p]atent claims are construed from the perspective of one of ordinary skill in the art.” *Sundance*, 550 F.3d at 1361 n.3; *see also, e.g., Thorner v. Sony Computer Entm’t Am. LLC.*, 669 F.3d 1362, 1365 (Fed. Cir. 2012) (“The words of a claim are generally given their ordinary and customary meaning as understood by a person of ordinary skill in the art when read in the context of the specification and prosecution history.”). Technical-expert testimony from a person who lacks ordinary skill in the art is inadmissible under Rule 702 because such testimony “serves only to cause mischief and confuse the factfinder.” *Sundance*, 550 F.3d at 1362.

B. Dr. Albert Karvelis

Pelican has submitted the report and deposition testimony of Dr. Albert Karvelis. The report and testimony include technical-expert opinions on the infringement and validity of the ‘561 Patent. Dr. Karvelis is a professional engineer licensed in many states. He holds a Ph.D. in Engineering Acoustics and has forty years’ experience in machinery and manufacturing—in particular, in “mechanical power transmission, machine design, vibration and acoustics; failure analysis and machinery; [and] fluid dynamics and fluid machinery.” (Docket Entry No. 86, Ex. B). In sum, his training, experience, and expertise are in mechanical engineering.

At his deposition, Dr. Karvelis testified about his experience in the asphalt industry. Dr. Karvelis has no experience working with a binder formulator, formulating asphalt mixtures, designing asphalt-manufacturing facilities, or working in a laboratory environment that produces samples of asphalt mixtures. (Docket Entry No. 86, Ex. C, at 25–26). Instead, his experience in the asphalt industry is limited to the “well over” 200 hours he has worked on client projects in

connection with cold-milling machinery. (*See id.*, at 18, 26–28). Dr. Karvelis explained, however, that he believes he has “enormous amount of experience” in “asphalt cement and its behavior as a fluid . . . because all fluids follow the same laws of physics.” (*Id.*, at 23). He also testified that he “gained an understanding of the making of rubberized asphalt” through “substantial research,” including reading an asphalt handbook. (*Id.*).

Dr. Karvelis clearly has expert knowledge in fluid mechanics and fluid dynamics. He just as clearly lacks expertise in asphalt formulation, as a binder formulator or otherwise. Wright argues that because Dr. Karvelis lacks “any training, knowledge, or experience as a binder formulator,” he lacks ordinary skill in the art and thus is unqualified to provide technical-expert testimony under Rule 702. (Docket Entry No. 86, at 4). Pelican responds that this court made no formal findings about the education and experience necessary for one to possess the ordinary skill in the art required to testify as a technical expert about infringement and validity of the claims at issue. Pelican additionally contends that, even had the court made such findings, they could be revised in light of the new evidence. (Docket Entry No. 107, at 2). Pelican argues that a person possessing ordinary skill in the art relevant to the ‘818 Patent would have different expertise and knowledge than one possessing ordinary skill in the art relevant to the ‘561 Patent, on which Dr. Karvelis will provide technical-expert testimony. According to Pelican, “[t]he relevant art is defined by the *nature of the problem* confronting the would-be inventor.” (*Id.*, at 6 (emphasis in original)). The nature of the problem posed by the ‘561 Patent, Pelican asserts, “is one involving fluid dynamics and mechanical equipment.” (*Id.*, at 4 (emphasis omitted)). Therefore, according to Pelican, a person possessing ordinary skill in the art for the ‘561 Patent is one who possesses expertise on fluid mechanics and fluid dynamics, which Dr. Karvelis clearly does. Pelican relies on *Ryko Manufacturing Co. v. Nu-*

Star, Inc., 950 F.2d 714, 716 (Fed. Cir. 1991), for the proposition that the problem facing the inventor dictates what skill in the art is required. (*See id.*, at 6–7).

Wright replies that “[t]he parties agree that one of ordinary skill in the art has asphalt formulation experience[,]” which Dr. Karvelis admittedly lacks. (Docket Entry No. 112, at 2). According to Wright, the case law does not support the proposition that “one of ordinary skill in the art could be someone with experience limited to a ‘sub-field.’” (*Id.*, at 5). In other words, although understanding parts of the ‘561 Patent may require knowledge of fluid mechanics and fluid dynamics, to understand and offer expert testimony the patent claims requires knowledge of asphalt formulation.

Pelican is correct that this court previously did not expressly make formal findings as to what ordinary skill in the art requires. Until Pelican filed its current motions, the record did not present the need for such a finding. As the Federal Circuit has explained:

While it is always preferable for the factfinder below to specify the level of skill it has found to apply to the invention at issue, the absence of specific findings on the level of skill in the art does not give rise to reversible error where the prior art itself reflects an appropriate level and a need for testimony is not shown.

Okajima v. Bourdeau, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (internal quotation marks omitted). Given Pelican’s motions, formal findings making explicit what is required to have ordinary skill in the relevant art are now necessary.

Although this court did not make formal findings in its *Markman* opinion, the court noted that the experts “agreed that the person having ordinary skill in the art is a binder formulator, not a binder technician.” (Docket Entry No. 58, at 27). The court resolved the experts’ insignificant disagreement over the precise level of education required by noting that the experts “agreed that

approximately a decade of experience working in a binder lab under a skilled binder formulator would be necessary to become a binder formulator[,]” and that this knowledge and experience was more important than a particular degree or credential. (*Id.*, at 28). This court’s *Markman* opinion therefore proceeded under the implicit finding, supported by the parties’ agreements, that one possessing ordinary skill in the art is a binder formulator or one who has worked for approximately a decade in a binder lab under a skilled binder formulator. This implicit finding applied to both of the disputed patents.

Pelican correctly points out that “district courts may engage in a rolling claim construction, in which the court revisits and alters its interpretation of the claim terms as its understanding of the technology evolves.” *Pressure Prods. Med. Supplies, Inc. v. Greatbatch Ltd.*, 599 F.3d 1308, 1316 (Fed. Cir. 2010) (internal quotation marks omitted). This iterative approach encompasses findings—implicit or formal—of what it means to possess ordinary skill in the art. The question the motion presents is whether, based on the expanded record, arguments, and authorities, this court should revise its previous implicit finding that, for the ‘561 Patent, one possessing ordinary skill in the art is one who has expertise in fluid mechanics and fluid dynamics, but not in asphalt formulation.

Both parties’ experts previously agreed that one possessing ordinary skill in the art for both patents is either a binder formulator or one who has worked for approximately a decade in a binder lab under a skilled binder formulator. This was, and is, consistent with the fact that both patents are directed at specialized processes for manufacturing asphalt products. Framing the issue in the terms Pelican now uses, the nature of the problem posed by both patents—not just the ‘818 Patent, as Pelican urges—is asphalt formulation specifically. The nature of the problem is neither fluid

dynamics specifically nor fluid mechanics generally. Pelican’s argument does not support a finding that expertise in fluid dynamics or fluid mechanics is a sufficient basis for technical-expert testimony on infringement or invalidity of the ‘818 Patent. Dr. Karvelis lacks skill in the relevant art for both the ‘561 and ‘818 Patents: asphalt formulation. That conclusion is supported by his testimony about working “well over” 200 hours on asphalt-related projects for clients. Assuming a 40-hour work week, Dr. Karvelis has worked approximately 5 weeks in asphalt formulation over his entire professional career. That conclusion is also supported by his testimony about reading a textbook about asphalt. If 5 weeks of experience and reading a textbook was all that was required to be skilled in the relevant art and qualified under Rule 702, the bar would be lower than the rule and case law demands. Dr. Karvelis’s undisputed skill is in the more general field of fluid dynamics and fluid mechanics. That does not render him qualified, under the applicable legal standards, to provide technical-expert testimony on two patents directed at asphalt formulation.

At a hearing, Pelican’s counsel argued that Dr. Karvelis is sufficiently skilled to testify “with respect to the circulation . . . step” of the ‘561 Patent. (Docket Entry No. 120, at 74). Under this limited approach, Dr. Karvelis would testify only to the circulation aspects of Claims 1 and 9 of the ‘561 Patent. Wright responds that Dr. Karvelis cannot simply testify about what the disputed term “jet spray nozzles” means in those claims because construing that term in the claims must be done in the context of asphalt formulation. (*Id.*, at 80). Put another way, Dr. Karvelis lacks relevant skill in the art of both the field and the invention of asphalt formulation. The case law supports Wright’s argument. “[T]he person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005)

(en banc); *see also Adams Respiratory Therapeutics, Inc. v. Perrigo Co.*, 616 F.3d 1283, 1290 (Fed. Cir. 2010). The context of both the ‘561 and ‘818 Patents is a process directed to asphalt formulation. That is the relevant art, and it is one in which Dr. Karvelis lacks ordinary skill in the art. To allow Dr. Karvelis’s proposed testimony construing “jet spray nozzles,” or the “circulation steps” in Claims 1 and 9, would permit claim construction in a vacuum, which the Federal Circuit makes clear is impermissible.

Finally, Pelican contends that this court may allow Dr. Karvelis to testify because the parties dispute what the ordinary skill in the relevant art consists of and whether Dr. Karvelis possesses it, creating a fact question for the jury. (*See* Docket Entry No. 107, at 11–12). There are two problems with Pelican’s argument. First, although there may be a dispute as to the extent of knowledge about binder formulation required, the record does not give rise to disputed facts material to deciding that experience and expertise in asphalt formulation are required to be a person of ordinary skill in the art relevant to the ‘561 and ‘818 Patents. The parties’ experts agreed that one possessing ordinary skill in the art is a binder formulator, or one who has worked for approximately a decade in a binder lab under a skilled binder formulator. The Federal Circuit has held:

While the ultimate conclusion of obviousness is for the court to decide as a matter of law, several *factual* inquiries underlie this determination. *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). These inquiries involve the scope and content of the prior art, the *level of ordinary skill in the field and of the invention*, the differences between the claimed invention and the prior art, and any objective evidence of non-obviousness such as long-felt need, and commercial success. *See id.*

SIBIA Neurosciences, Inc. v. Cadus Pharm. Corp., 225 F.3d 1349, 1355 (Fed. Cir. 2000) (emphasis added). Although a factfinder could conclude that less than a decade’s worth of experience is sufficient to be skilled in the art, no reasonable jury could conclude that someone with Dr. Karvelis’s

experience and expertise—highly trained in fluid dynamics and fluid mechanics generally, but only slight, tangential experience with asphalt formulation—is sufficiently skilled in the relevant art. To adopt the approach Pelican advocates would be inconsistent with the court’s role as gatekeeper under Rule 702 and the applicable case law. See *Kumho*, 526 U.S. at 149; *Daubert*, 509 U.S. at 597.

In sum, this court adheres to and makes explicit its previous ruling that a person possessing ordinary skill in the relevant art is a binder formulator, or one who has worked for approximately a decade in a binder lab under a skilled binder formulator. Dr. Karvelis does not meet this criteria. He is unqualified, under the applicable legal standards, to provide technical-expert testimony on the ‘561 Patent as proposed by Pelican. Wright’s motion to exclude his expert testimony is granted.

C. Eric Steffe

Pelican has submitted expert testimony of Eric Steffe on Patent Office practice and alleged irregularities in that office’s handling of the ‘818 Patent.² Steffe has over twenty years’ experience as a patent examiner and practitioner. From 1989 to 1991, Steffe worked as a patent examiner at the Patent Office. Since 1991, he has worked at the law firm of Sterne, Kessler, Goldstein and Fox PLLC: from 1991 to 1993 as a student associate, from 1993 to 1999 as an associate, and from 2000 to the present as a director. (Docket Entry No. 86, Ex. D, at 1–2).

²In Steffe’s words, Pelican retained him

to render an opinion on whether a reasonable patent examiner, if armed with knowledge of the information contained in the Declaration and Expert Report of Costandi A. Audeh . . . and the Declaration and Expert Report of Thomas R. Landon . . . would have 1) deemed claims 11, 12 and 13 of United States Patent No. 5,397,818 (hereinafter “the ‘818 Patent”) to be patentable over the disclosure of United States Patent No. 4,358,554 (hereinafter “the ‘554 Patent”); and 2) deemed the disclosure of the ‘818 Patent as providing enablement and written descriptive support for claims 11, 12 and 13 as required by 35 U.S.C. § 112, first paragraph.

(Docket Entry No. 86, Ex. D, at 2–3).

Wright argues that Steffe should not be allowed to testify for two reasons. First, “Steffe is not skilled in the art and has no basis for explaining how one skilled in the art would view the ‘554 Patent.” (Docket Entry No. 86, at 5). Second, the topics of Steffe’s proposed testimony—Patent Office procedure and how it was applied improperly to issue the ‘818 Patent—is irrelevant to any matter in this case. (*Id.*, at 5–6).

Pelican responds that “Steffe is skilled in the art, as he is a former Patent Examiner at the Patent Office who was assigned to the general art area of the ‘818 Patent[.]” (Docket Entry No. 107, at 12).³ Steffe is an expert in Patent Office practices and procedures. Pelican argues that the Patent Office’s handling of the ‘818 Patent is relevant to the invalidity contention and that Steffe is qualified under Rule 702 to provide expert testimony on this issue. (*See generally* Docket Entry No. 107, at 13–20; Docket Entry No. 120, at 61–64). Pelican cites case law that it argues “confirms that former patent examiners should be permitted to testify at trial regarding patent office procedures as they apply to the patent in suit.” (Docket Entry No. 107, at 19). Pelican relies on *Neutrino Development Corp. v. Sonosite, Inc.*, 410 F. Supp. 2d 529 (S.D. Tex. 2006), which Pelican reads as having “strikingly similar facts” and in which the district judge allowed a former patent examiner “to testify as to any actual defects that occurred in the application process” of the patent at issue in that case. (*Id.*; *see also* Docket Entry No. 120, at 66 (citing *Neutrino* as Pelican’s best supporting case)). At the motion hearing, Wright responded that Steffe’s only expertise is as a patent lawyer;

³If Pelican is arguing that Steffe’s experience and training give him ordinary skill in the art relevant to the ‘818 Patents, that assertion lacks merit. Steffe has no experience whatsoever in asphalt formulation. He is not skilled in the relevant art of specialized processes for manufacturing asphalt products. At the motion hearing, Pelican appeared to concede this obvious fact. (*See* Docket Entry No. 120, at 62 (explaining that “even if [Steffe]’s not one having any skill in whatever art area it is,” Steffe relies on other technical experts in the area)).

and that to the extent he will opine about invalidity, he is offering legal argument, not expert testimony. (See Docket Entry No. 120, at 60, 64–66).

The court has reviewed the case law Pelican cited, as well as other cases it did not cite. Courts do allow former patent examiners to testify generally about the patent-application process before the Patent Office. *See Bone Care Int'l LLC v. Pentech Pharm., Inc.*, No. 08-CV-1083, 2010 WL 3928598, at *14–15 (N.D. Ill. Oct. 1, 2010); *Neutrino*, 410 F. Supp. 2d at 545; *Tap Pharm. Prods., Inc. v. Owl Pharm., L.L.C.*, No. 1:99 CV 2715, 2003 WL 25695241, at *1 (N.D. Ohio Feb. 18, 2003); *Bausch & Lomb, Inc. v. Alcon Labs., Inc.*, 79 F. Supp. 2d 252, 255 (W.D.N.Y. 2000); *Minn. Mining & Mfg. Co. v. Appleton Papers Inc.*, Civ. No. 4-95-786 (JRT/RLE), 1998 WL 1054207, at *2 (D. Minn. June 24, 1998); *Revlon Consumer Prods. Corp. v. L'Oreal S.A.*, Civ. A. No. 96-192 MMS, 1997 WL 158281, at *3 (D. Del. Mar. 26, 1997). Cf. *UCB Societe Anonyme v. Mylan Labs., Inc.*, No. 1:04-CV-683WSD, 2006 WL 839397, at *2–3 (N.D. Ga. Mar. 2, 2006) (limiting former patent examiner's testimony to “issues of fact, including the relationship and obligations of patent lawyers to the Patent Office and how to interpret information in the prosecution history” and not to legal issues, such as how he would construe the claims); accord *Arlaine & Gina Rockey, Inc. v. Cordis Corp.*, No. 02-22555-CIV, 2004 WL 5504978, at *24–25 (S.D. Fla. Jan. 5, 2004). The Federal Circuit recently endorsed this proposition. *See Sundance*, 550 F.3d at 1361 n.2. But these same courts prohibit former patent examiners from testifying about problems at, and the propensity for error in, the Patent Office, and the effect on the validity of specific patents. *See Bone Care*, 2010 WL 3928598, at *14–15; *Neutrino*, 410 F. Supp. 2d at 544; *Tap Pharm.*, 2003 WL 25695241, at *1; *Bausch & Lomb*, 79 F. Supp. 2d at 255–56; *Minn. Mining*, 1998 WL 1054207, at *2; *Revlon*, 1997 WL 158281, at *3; see also *Transamerica Life Ins. Co. v. Lincoln Nat'l Life Ins.*

Co., 597 F. Supp. 2d 897, 920 (N.D. Iowa 2009) (“Evidence of the alleged inadequacy of the PTO’s examination of the ‘201 patent, on the other hand, would be potentially unduly prejudicial, outweighing any marginal probative value of such evidence, within the meaning of Rule 403, because such evidence would improperly undermine the presumption of validity of the patent and confuse or mislead the jury about what is actually relevant to Transamerica’s invalidity defenses still in the case[.]”). *Cf. Shuffle Master, Inc. v. MP Games, LLC*, 553 F. Supp. 2d 1202, 1208–09 (D. Nev. 2008) (excluding testimony of former patent examiner as “legal opinions [that] cannot properly be considered as factual evidence”). Such testimony, these courts correctly explain, impermissibly undermines the presumption of validity under 35 U.S.C. § 282. *Neutrino*, 410 F. Supp. 2d at 544; *Tap Pharm.*, 2003 WL 25695241, at *1; *Bausch & Lomb*, 79 F. Supp. 2d at 255–56. “Aspersions are not evidence.” *EZ Dock, Inc. v. Schafer Sys., Inc.*, No. Civ. 98-2364(RHK/AJB), 2003 WL 1610781, at *13 (D. Minn. Mar. 8, 2003); *see also Applied Materials, Inc. v. Advanced Semiconductor Materials*, No. C 92-20643, 1995 WL 261407, at *3 (N.D. Cal. Apr. 25, 1995) (excluding testimony “about overwork, quotas, awards or promotions at the Patent Office, or the number of patents that issue annually or insinuating that the Patent Office does not do its job properly” as “irrelevant speculation”). The Federal Circuit has held testimony “that patent examiners are prone to error because they are overworked and inexperienced” to be unfairly prejudicial. *Novo Nordisk A/S v. Becton Dickinson & Co.*, 304 F.3d 1216, 1220 (Fed. Cir. 2002).

Against the overwhelming majority of authority, including Federal Circuit cases, are a small number of district-court opinions allowing former patent examiners to give legal conclusions as technical-expert testimony. *See Aspex Eyewear, Inc. v. E’Lite Optik, Inc.*, No. CIV. A.

398CV2996D, 2002 WL 1751381, at *35 (N.D. Tex. Apr. 4, 2002) (allowing a former patent examiner to testify about the disputed patent's prosecution history, so long as the examiner "limits his testimony to the mixed issues of fact and law about which he possesses a special expertise as a patent attorney and does not offer expert opinions on questions that only someone in the eyewear industry would be qualified to answer"); *Talarico v. Marathon Shoe Co.*, 182 F. Supp. 2d 102, 113–14 (D. Me. 2002) (allowing a former patent examiner to provide legal conclusions because those conclusions "help[] to articulate Marathon's defense"). These opinions are distinguishable from, and inconsistent with, the majority of cases, including binding precedent from the Federal Circuit.

A good example of such binding precedent is the Federal Circuit's 2008 decision in *Sundance*. The defendant attempted to introduce a patent attorney's technical-expert testimony under Rule 702 about:

USPTO practices and procedures (eight pages explaining prosecution and reexamination); claim construction (four pages interpreting the claim construction ruling); noninfringement (seven pages concluding that the claims of the '109 patent are not infringed); invalidity, including anticipation and obviousness (thirteen pages concluding that the claims of the '109 patent are invalid); and inequitable conduct (six pages concluding that the '109 patent is unenforceable due to inequitable conduct).

550 F.3d at 1360. The plaintiff moved to exclude the attorney from testifying at trial, arguing that he lacked ordinary skill in the art and could not provide expert testimony on invalidity or infringement. The defendant responded that the attorney was qualified due to his experience as a patent attorney and because courts allow patent attorneys to testify about general procedures before the Patent Office. *Id.* The district court denied the motion, allowing the attorney to testify about all the subjects addressed in his report. The Federal Circuit reversed. It emphasized that, to provide

expert testimony on the issues of noninfringement and invalidity, the proposed expert must be skilled in the relevant art, not just in Patent Office procedures:

[I]t is an abuse of discretion to permit a witness to testify as an expert on the issues of noninfringement or invalidity unless that witness is qualified as an expert in the pertinent art. Testimony proffered by a witness lacking the relevant technical expertise fails the standard of admissibility under Fed. R. Evid. 702. Indeed, where an issue calls for consideration of evidence from the perspective of one of ordinary skill in the art, it is contradictory to Rule 702 to allow a witness to testify on the issue who is not qualified as a technical expert in the art. We understand that patent lawyers are often qualified to testify as technical experts, but such a qualification must derive from a lawyer's technical qualifications in the pertinent art.

Id. at 1363. The court emphasized that patent attorneys or former patent examiners were not only prohibited from providing expert testimony on the issues of noninfringement or invalidity, but also from testifying about “any of the underlying technical questions, such as the nature of the claimed invention, the scope and content of prior art, the differences between the claimed invention and the prior art, or the motivation of one of ordinary skill in the art to combine these references to achieve the claimed invention.” *Id.* at 1364. In *Sundance*, the patent attorney wholly lacked the experience necessary to “possess[] the relevant expertise in the pertinent art.” *Id.* at 1362. Being an experienced patent lawyer was insufficient because admitting testimony from such a person, “with no skill in the pertinent art, serves only to cause mischief and confuse the factfinder. Unless a patent lawyer is also a qualified technical expert, his testimony on these kinds of technical issues is improper and thus inadmissible.” *Id.*

The case law makes it clear that a former patent examiner, such as Steffe, may testify about general Patent Office practices and procedures, but may not opine about how those practices and procedures may lead to erroneous approvals of patents, in general or as applied to the patents at issue. Steffe cannot speculate about possible errors in the approval of the patent at issue in the case.

Steffe cannot testify about noninfringement and invalidity because he lacks ordinary skill in the relevant art. As in the *Sundance* case, five pages of Steffe's expert report are devoted to Patent Office practices and procedures, (*see* Docket Entry No. 86, Ex. D, at 3–8); nine pages to the '818 Patent's invalidity with respect to anticipation, (*see id.*, at 8–17); and four pages to the '818 Patent's invalidity with respect to enablement, (*see id.*, at 17–21). With respect to the five pages on practices and procedures, to the extent that Pelican wishes to present Steffe's testimony about Patent Office practices and procedures generally, it may do so. But part of this section discusses intrinsic pressure on Patent Office examiners that creates a higher risk of erroneous dispositions of patent applications. Such testimony is inadmissible. The remainder of Steffe's expert report focuses on his opinion that the '818 Patent is invalid. Steffe lacks ordinary skill in the relevant art. He cannot testify about invalidity, including about anticipation and enablement. “Admitting testimony from a person such as Mr. [Steffe], with no skill in the pertinent art, serves only to cause mischief and confuse the factfinder.” 550 F.3d at 1362.

In a footnote, Pelican attempts to distinguish its case from all the others that

exclude[the former patent examiner's] testimony regarding infringement because he was not skilled in the art. However, this is to be contrasted with the facts regarding Mr. Steffe's opinions regarding invalidity, as Mr. Steffe relies on the testimony and opinions of persons who are skilled in the art.

(Docket Entry No. 107, at 19 n.9). That is a distinction without a difference. A witness is not qualified to provide technical-expert testimony merely by studying declarations of those who do possess ordinary skill in the relevant art. The technical expert must have the skill. Steffe does not.

The motion to exclude Steffe as a technical expert is granted in part and denied in part.⁴ As discussed in detail above, Steffe may testify about Patent Office practices and procedures generally. His expert testimony is otherwise inadmissible.

D. Dr. Gayle King

Wright submitted a report and deposition testimony by Dr. Gayle King on how Pelican's products infringe the '561 and '818 Patents. Dr. King has over thirty years' experience in the asphalt industry. Pelican has moved to strike this report and to preclude Dr. King from testifying at trial. Pelican does not dispute that Dr. King possesses ordinary skill in the relevant art. Pelican's argument for exclusion is that Dr. King's expert testimony lacks the foundation required for admissibility under *Daubert* and *Kumho*. According to Pelican, "Dr. King provides no calculations, simulations, analyses, references to treatises or publications, or even bench experiments run by him or others, modeling the Pelican operation to prove or support his conclusion." (Docket Entry No. 88, at 3; *see also* Docket Entry No. 110, at 3; Docket Entry No. 120, at 102).⁵ Pelican also faults Dr. King for failing to exclude other explanations for his conclusion that Pelican's processes include "jet spray nozzles" because of the absence of asphalt-rubber residue at the top of the tank. Citing this court's opinion in *Lilley v. Home Depot U.S.A., Inc.*, 567 F. Supp. 2d 953, 958 (S.D. Tex. 2008),

⁴This court's conclusion is bolstered by other cases cited by Pelican. Those cases support the proposition that even when an attorney couches legal argument as expert testimony, the court "has complete discretion to adopt the legal opinion as its own, to find guidance from it, or to ignore it entirely, or even to exclude it." *Biomedical Polymers, Inc. v. Evergreen Indus., Inc.*, 976 F. Supp. 98, 100 (D. Mass. 1997) (quoting *Markman*, 52 F.3d at 983); *accord Talarico*, 182 F. Supp. 2d at 113. Even absent the legal principles discussed above, this court would exercise its discretion to exclude Steffe's expert report, with the exception of its discussion of Patent Office practices and procedures generally, as unhelpful to the court in deciding the issues of law.

⁵Pelican has repeatedly called King's opinions "junk science." (Docket Entry No. 88, at 6; Docket Entry No. 110, at 2; Docket Entry No. 120, at 101). The pejorative is unnecessary. Pelican's briefing and arguments at the motion hearing make the issue perfectly clear: King, in his expert report, has failed to provide a reliable foundation for his conclusions by failing to explain adequately how he arrived at those conclusions.

Pelican asserts that Dr. King's failure to consider alternative explanations makes his expert testimony unreliable under *Daubert* and *Kumho*. (Docket Entry No. 110, at 3–5).⁶

“Federal Rule of Evidence 702 imposes a special obligation upon a trial judge to ensure that any and all scientific testimony is not only relevant, but reliable.” *Kumho*, 526 U.S. at 147 (internal quotation marks and alteration omitted). The district court must conduct “a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid”—the reliability requirement—“and of whether that reasoning or methodology properly can be applied to the facts in issue”—the relevance requirement. *Wells v. SmithKline Beecham Corp.*, 601 F.3d 375, 378 (5th Cir. 2010) (internal quotation marks omitted). “When the methodology is sound, and the evidence relied upon sufficiently related to the case at hand, disputes about the degree of relevance or accuracy (above the minimum threshold) may go to the testimony’s weight, but not its admissibility.” *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 852 (Fed. Cir. 2010) (citing *Knight v. Kirby Inland Marine, Inc.*, 482 F.3d 347, 351 (5th Cir. 2007); *Moore v. Ashland Chem. Inc.*, 151 F.3d 269, 276 (5th Cir. 1998) (en banc)). The issue is not whether King’s expert testimony is relevant, but instead whether it is reliable.

The Fifth Circuit recently summarized what district courts evaluating reliability under Rule 702 are to consider:

The Supreme Court has delineated certain factors to assist courts in evaluating the foundation of a given expert’s testimony, though the Court carefully emphasized the nonexhaustive nature of the listing.

⁶In its motion, Pelican raised other grounds for excluding Dr. King’s testimony, including that his expert report conflicts with his testimony at the *Markman* hearing. (See Docket Entry No. 88, at 4–7). Pelican’s reply brief, as well as its arguments during the motion hearing, make clear that its central argument for exclusion is the lack of a reliable foundation for the conclusions stated in the report. (See Docket Entry No. 110; Docket Entry No. 120, at 100–08). The alternative grounds Pelican raises go to the weight to be given Dr. King’s expert opinions, not to the threshold question of admissibility under *Daubert* and *Kumho*. See *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 852 (Fed. Cir. 2010), *quoted infra*.

Suggested considerations include: whether the theory or technique the expert employs is generally accepted; whether the theory has been subjected to peer review and publication; whether the theory can and has been tested; whether the known or potential rate of error is acceptable; and whether there are standards controlling the technique's operation.

Wells, 601 F.3d at 378–79 (internal quotation marks, alterations, and footnotes omitted). The expert must sufficiently explain how he arrived at the conclusions so that the district court can evaluate reliability. “There is no formula, and the court must judge admissibility based on the particular facts of the case.” *Id.* at 379. “[A] district court has broad latitude in deciding how to determine reliability, as well as in its ultimate reliability determination.” *United States v. John*, 597 F.3d 263, 274 (5th Cir. 2010). This latitude includes holding an evidentiary hearing, if necessary. *See Murray v. Marina Dist. Dev. Co.*, 311 F. App’x 521, 523 (3d Cir. 2008) (citing *Padillas v. Stork-Gamco, Inc.*, 186 F.3d 412, 417–18 (3d Cir. 1999)); *United States v. Frazier*, 387 F.3d 1244, 1264 (11th Cir. 2004) (en banc); *Saudi v. S/T Marine Atl.*, 159 F. Supp. 2d 512, 517–18 (S.D. Tex. 2001) (collecting circuit cases); *see also Nelson v. Tenn. Gas Pipeline Co.*, 243 F.3d 244, 249 (6th Cir. 2001) (“[T]he Supreme Court’s decision in *Kumho* makes clear that whether to hold a hearing is a question that falls within the trial court’s discretion.”); *Leake v. United States*, — F. Supp. 2d —, 2011 WL 6934057, at *3 n.4 (E.D. Pa. 2011) (same).

Pelican does not dispute either that Dr. King is skilled in the ordinary art or that his opinions are relevant.⁷ The issue is the foundation for, and reliability of, those expert opinions. Pelican correctly points out that Dr. King’s expert report does not disclose the basis (or bases) for his conclusions. The report essentially contains only King’s unexplained conclusions. This is an inadequate basis for this court to assess reliability. As the Seventh Circuit has explained:

⁷Even if Pelican had made such arguments, the court would reject them.

To be admissible under Rule 702, the expert's opinion must offer more than a "bottom line." *Wendler & Ezra, P.C. v. Am. Int'l Group, Inc.*, 521 F.3d 790, 791 (7th Cir. 2008) (per curiam) (quotation omitted). The expert must explain the methodologies and principles supporting the opinion. See Fed. R. Evid. 702 (requiring that expert testimony be "the product of reliable principles and methods"); *Smith*, 215 F.3d at 718 ("[T]he role of the court is to . . . examine the methodology the expert has used in reaching his conclusions.").

Minix v. Canarecci, 597 F.3d 824, 835 (7th Cir. 2010).

Dr. King's failure to explain adequately the basis or bases for his conclusions does not require excluding his expert testimony at trial. Instead, it is appropriate to hold an evidentiary hearing to allow Wright to explain, and Pelican to probe, the foundation for and reliability of Dr. King's conclusions and opinions. The motion to exclude his expert testimony is denied, but without prejudice to Pelican's reassertion after the evidentiary hearing. This hearing is scheduled for **August 6, 2012, at 8:30 a.m.** in Courtroom 11-B.

II. The Motions to Reconsider the Construction of Disputed Claim Terms

Pelican has filed two motions seeking reconsideration of this court's construction of three disputed terms in the '561 Patent: "middle portion"; "bottom portion"; and "jet spray nozzles." (Docket Entry Nos. 94–95). Pelican also asks this court to construe an additional term: "reactor vessel."

A. The Applicable Law

This court's previous claim-construction opinion detailed the legal standards that govern patent claim construction. (See Docket Entry No. 58, at 10–16). As noted, a district court may engage in a "rolling claim construction, in which the court revisits and alters its interpretation of the claim terms as its understanding of the technology evolves." *Pressure Prods.*, 599 F.3d at 1316. Rolling claim construction is especially necessary "where issues involved are complex, either due

to the nature of the technology or because the meaning of the claims is unclear from the intrinsic evidence.” *Jack Guttman, Inc. v. Kopykake Enters., Inc.*, 302 F.3d 1352, 1361 (Fed. Cir. 2002).

One district court has concluded that when a party seeks reconsideration of a claim-construction opinion “after full opportunity for the parties to present evidence relevant to claim construction with the detailed procedures established by the [court]’s local rules”—*Markman* briefing followed by a *Markman* hearing, etc.—then the motion for reconsideration should be treated under the usual standards for reconsideration under Federal Rules of Civil Procedure 59(e) or 60(b).

Therasense, Inc. v. Becton, Dickinson & Co., 560 F. Supp. 2d 835, 844 & n.6 (N.D. Cal. 2008), *rev’d on other grounds*, 649 F.3d 1276 (Fed. Cir. 2011) (en banc); *see also Williams v. Home Depot USA, Inc.*, Civ. A. No. H-10-2493, 2012 WL 1098358, at *3 (S.D. Tex. Mar. 30, 2012) (explaining when Rule 60(b), and not Rule 59(e), applies to a motion for reconsideration). The Federal Circuit, however, appears to suggest that these demanding standards for reconsideration do not apply when a party is seeking reconsideration of a claim-construction opinion. Instead, a district court is free to revise its claim construction if its “evolved” understanding of the technology makes it appropriate. *See Conoco, Inc. v. Energy & Env'tl. Int'l, L.C.*, 460 F.3d 1349, 1359 (Fed Cir. 2006) (“[A] district court may engage in claim construction during various phases of litigation, not just in a *Markman* order. We have recognized that district courts may engage in rolling claim construction . . . as its understanding of the technology evolves.” (internal quotation marks omitted)); *see also Carnegie Mellon Univ. v. Marvell Tech. Grp., Ltd.*, Civ. No. 09-290, 2012 WL 1203353, at *5 (W.D. Pa. Apr. 10, 2012); *Accentra Inc. v. Staples, Inc.*, — F. Supp. 2d —, 2011 WL 7563039, at

*3 (C.D. Cal. 2011); *Itex, Inc. v. Mount Vernon Mills, Inc.*, Nos. 08 C 1224, 05 C 6110, 2011 WL 2470343, at *2 (N.D. Ill. June 20, 2011); *Wireless Ink Corp. v. Facebook, Inc.*, 787 F. Supp. 2d 298, 309–10 (S.D.N.Y. 2011); *Mikkelsen Graphic Eng’g Inc. v. Zund Am., Inc.*, No. 07-C-0391, 2011 WL

1330782, at *5–6 (E.D. Wis. Apr. 7, 2011). The question is whether, based on the record as developed since the court’s March 2011 *Markman* opinion, the court should revise its claim construction based on an evolved understanding of the technology at issue.

B. “Middle Portion” and “Bottom Portion”

This court construed “middle portion” as “an area above a bottom portion such that the jet spray nozzles provide sufficient shear to mix the contents[,]” and “bottom portion” as “an area below a middle portion.” (Docket Entry No. 58, at 55). Pelican had urged narrower definitions: “middle portion” as “that part of the interior of the reactor vessel intersecting a line whereby one-half of the total available volume of the vessel is on one side of the line and one-half of the total available volume of the vessel is on the other side of the line,” and “bottom portion” as “the area surrounding the lower interior face of the reactor vessel.” (*Id.*, at 38). Pelican argued that these narrower definitions were necessary to avoid invalidity for indefiniteness. (*Id.*). This court disagreed, concluding that “[t]he intrinsic and extrinsic evidence show that the terms are relative terms, denoting the relationship of one portion to another, not an absolute position within the reactor vessel.” (*Id.*, at 39). In particular, the court noted the expert testimony of Dr. King, who is skilled in the relevant art, supporting the relatively more expansive—yet definite—constructions of “middle portion” and “bottom portion.” Pelican’s expert witness did not dispute Dr. King’s testimony. (*See id.*, at 40–44).

In this motion for reconsideration, Pelican again seeks a narrower construction: “middle portion” as “the middle third of the mixture in the reactor vessel[,]” and “bottom portion” as “the lower third of the mixture in the reactor vessel.” (Docket Entry No. 94, at 13). In support of reconsideration, Pelican makes two arguments. First, a narrower construction is appropriate based on the testimony of Dr. Karvelis, who Pelican has asserted is skilled in the relevant art. Second,

“since the *Markman* hearing, evidence has emerged with respect to the location of supposed ‘spray patterns’ in Pelican’s reactor vessel, as well as the location of the opening of the return circulation conduit into the reactor vessel” supporting narrower definitions of “middle portion” and “bottom portion.” (*Id.*, at 2).

The first argument does not weigh in favor of revising the claim construction. Although the earlier opinion did not include express findings about ordinary skill in the relevant art, those findings were implicit. In this opinion, this court has made those findings explicit: one possessing ordinary skill in the relevant art is a binder formulator, or one who has worked for approximately a decade in a binder lab under a skilled binder formulator. In doing so, this court rejected Pelican’s argument that the ordinary skill in the relevant art is different for the ‘561 Patent than for the ‘818 Patent and rejected the argument that Dr. Karvelis possessed ordinary skill in the relevant art. To the extent that extrinsic evidence is helpful in construing “middle portion” and “bottom portion,”⁸ the construction of these terms by a person unskilled in the relevant art is entitled to little or no weight. *See Arlaine & Gina Rockey*, 2004 WL 5504978, at *23, 25 (preventing a witness unskilled in the relevant art from providing opinion testimony on claim construction). Dr. Karvelis’s constructions of “middle portion” and “bottom portion” do not provide a valid reason for construing the terms anew.

The second argument rests on Pelican’s theory that “middle portion” and “bottom portion” need to be construed to place the location of the “jet spray nozzles” in the reactor vessel. Pelican asserts that construing “middle portion” and “bottom portion” is intertwined with construing “jet

⁸*See AIA Eng’g Ltd. v. Magotteaux Int’l S/A*, 657 F.3d 1264, 1273 (Fed. Cir. 2011) (explaining that the Federal Circuit “generally view[s] extrinsic evidence as less reliable than the patent and its prosecution history in determining how to read terms” (internal quotation marks omitted)).

spray nozzles.” (Docket Entry No. 94, at 2–3; *see also* Docket Entry No. 120, at 129). Wright disagrees. According to Wright:

Claim 1 of the ‘561 Patent does not limit where the jet nozzles are located or where the liquid is extracted. Claim 1 requires only that the “mixture” is circulated from “a middle portion” into a “bottom portion.” As such, the “middle portion” and “bottom portion” relate to the mixture, not the location of [the] structure such as “jet spray nozzles”.

(Docket Entry No. 103, at 4). At the motion hearing, Wright reiterated that the focus of the was on the mixture’s circulation, not on the nozzle location. (*See* Docket Entry No. 120, at 125–28). Wright’s argument is consistent with the current record and the applicable law. As counsel for Pelican correctly noted at the motion hearing, “The claim specifically calls for the circulation path from the middle to the bottom.” (*Id.*, at 128). The focus is on mixture circulation, not on nozzle location. At the *Markman* hearing, Dr. King credibly testified that neither “middle portion” nor “bottom portion” required a more restrictive construction because of the claim’s focus on circulation. (*See* Docket Entry No. 50, at 53–54; *see also id.*, at 116–18, 123–24). Dr. King’s testimony is confirmed by the claim as well as the specification. *See, e.g.*, ‘561 Patent col. 9 ll. 13–18 (“circulating part of the mixture from a middle portion of the reactor vessel into a bottom portion”), col.4 ll.15–23 (focusing on the circulation and recirculation of the mixture). Pelican’s narrower definition is required only if the location of the “middle portion” and “bottom portion” needs to be defined with far more specificity. The record continues to show that a person possessing ordinary skill in the relevant art would understand “middle portion” and “bottom portion” under the court’s previous construction of those terms, and that a more restrictive definition is both unnecessary and not envisioned by the claim.

Pelican reurges its argument that the court's construction of these terms makes the claims invalid the claims for indefiniteness. Pelican previously raised that argument. The court previously analyzed it in detail and found it unpersuasive. (*See* Docket Entry No. 58, at 43–44). Pelican has presented no new evidence that requires a different conclusion. The claims, as construed, are not indefinite.

Pelican's motion for reconsideration of the construction of the claim terms "middle portion" and "bottom portion" is denied. The court adheres to its previous construction of those terms.⁹ As a result, there is no need to construe "reactor vessel" as Pelican urges.

C. "Jet Spray Nozzles"

This court previously construed "jet spray nozzles" as "devices or structures with an aperture capable of providing a propulsion spray of the material passing through it." (Docket Entry No. 58, at 56. Pelican had urged a narrower construction:

a plurality of devices, each having a body, an elongated nozzle tube extending from the body, such that the nozzles provide a propulsion spray of the liquid mixture within the body of the liquid mixture in the reactor vessel which: (1) promotes turbulence; (2) increases pressure; (3) simulates a boiling action in the liquid mixture; and (4) allows the mixture to move upwardly through the reactor vessel, without oxidation or air blowing.

(*Id.*, at 45). This court rejected Pelican's proposed construction, concluding that the intrinsic and extrinsic evidence supported defining the term "based on the ordinary meaning to a person having ordinary skill in the art and modified by the use of the term in the claims[.]" (*Id.*, at 47). Pelican appeared to be improperly importing limitations into the claim from its specification. (*See id.*, at

⁹Pelican also faults this court for using the word "shear" in construing "middle portion" because "the word 'shear' is nowhere to be found in the specification." (Docket Entry No. 94, at 9). Claim terms do not need to be defined according only to words used in the specification; doing so would be tautological.

46). This court noted Dr. King's repeated, and uncontested, testimony "that, from the perspective of one skilled in the art, the primary concern would be the ability of the nozzle to cause to propel the substance passing through it." (*Id.*). At the same time, the court recognized the possibility that it might need to revisit the construction of "jet spray nozzles" as the understanding of the technology evolved. (*Id.*, at 48).

In this motion for reconsideration, Pelican again seeks a narrower construction of this claim term as "devices, submerged within the liquid mixture, having an aperture capable of providing a liquid jet to create turbulence and boiling within the mixture." (Docket Entry No. 95, at 12). According to Pelican, this construction accomplishes five purposes:

(1) provides for the physical location of the devices in the process, *i.e.*, submerged within the liquid mixture of asphalt and whole tire rubber (this is entirely consistent with the specification and the technical extrinsic evidence); (2) provides for "an aperture" (this feature is undisputed and in accord with the Court's present construction); (3) describes the devices as being "capable of" providing ("capable of" is used in the Court's present construction); (4) shows that a "liquid jet" is completely in alignment with the specification and even the inventor's testimony regarding "turbulence"; and (5) requires the device to be capable of "creating turbulence" and "boiling" in the mixture, both of which are clearly described in the specification and are supported by the inventor's own testimony.

(*Id.*).

Pelican's revised proposed construction of "jet spray nozzles" relies almost entirely on the opinions of Dr. Karvelis.¹⁰ But Dr. Karvelis does not possess ordinary skill in the relevant art. He is an expert on fluid mechanics and fluid dynamics, an expertise that supports a definition of "jet

¹⁰Pelican disingenuously states that "[t]hree witnesses, including two experts, Dr. Albert Karvelis, P.E. (Pelican) and Dr. Gayle King (Wright), as well as the inventor himself, disagree with this Court's construction" of the term. (Docket Entry No. 95, at 2). Dr. Karvelis clearly disagrees with this court's construction, but he lacks ordinary skill in the relevant art.

“spray nozzles” in those fields. But the patent claims and terms are not an invention in that field. “[T]he ordinary and customary meaning of the claim term is the meaning that the term would have to a person of ordinary skill in the art in question[.]” *Phillips*, 415 F.3d at 1313. The task is to construe “jet spray nozzles” according to how a binder formulator, or one who has worked for approximately a decade in a binder lab under a skilled binder formulator, would construe the term.

Pelican seeks to omit the word “spray” from the construction because, according to Dr. Karvelis, “[s]pray . . . is a term that’s associated with gases.” (Docket Entry No. 120, at 140). But that association is one made by someone who is knowledgeable about fluids, not about asphalt formulation. As this court noted in the hearing on this motion:

[I]f you think about holding a garden hose into your kid’s swimming pool and filling the pool, it’s a jet spray when I spray it into the air and it’s still a jet spray when I stick it under water. That’s my lay perception. . . .

[T]o someone who is not an expert in fluids, but who is perhaps one of ordinary skill in the asphalt world, the term “jet spray” is not confusing or incorrectly applied even if the nozzle that’s creating that jet spray is underneath liquid.

(*Id.*).

Dr. Karvelis and Pelican would construe “jet spray nozzles” differently from how one possessing ordinary skill in the relevant art of the ‘561 and ‘818 Patents¹¹—asphalt formulation—would construe the term. As with the construction of the terms “middle portion” and “bottom portion,” Dr. Karvelis’s proposed construction of “jet spray nozzles” is entitled to little weight. And, as with the terms “middle portion and bottom portion,” the extrinsic evidence

¹¹In this motion, Pelican again argues that one possessing ordinary skill in the relevant art of the ‘561 Patent is different than that of the ‘818 Patent. This court already rejected that argument above.

continues to support applying an ordinary meaning to the term “jet spray nozzles.” At the *Markman* hearing, Pelican did not dispute—either through expert testimony or other evidence—Dr. King’s repeated testimony “that, from the perspective of one skilled in the art, the primary concern would be the ability of the nozzle to cause to propel the substance passing through it.” (Docket Entry No. 58, at 46). Pelican’s support for its current attempt to dispute that conclusion is Dr. Karvelis’s testimony and expert report. That is inadequate.

Finally, in large part, the purposes that Pelican identifies as supporting its proposed construction go to defining the term based on the specification. As the Federal Circuit has explained, the claims must be read in light of the specification, but limitations must not be improperly imported from the specification into the claims. *Phillips*, 415 F.3d at 1323. Pelican’s construction does not attempt to read the claim in light of the specification, as opposed to reading the specification into the claims.

One part of Pelican’s proposed revised claim construction is appropriate. “Jet spray nozzles” should include the phrase “submerged within the liquid mixture.” At the *Markman* hearing, Dr. King testified that the exact location of the jet spray nozzles was irrelevant so long as “both were below the surface of the liquid.” (Docket Entry No. 50, at 116). Pelican did not present controveering testimony or evidence. This interpretation is supported by the claim’s specification. *See* ‘561 Patent, col.4 ll.2–4 (“The jet spray nozzles provide a propulsion spray of the liquid mixture within the body of the liquid mixture in the reactor vessel[.]”). The intrinsic and extrinsic evidence, however, does not support reading further limitations from the specification into the construction of “jet spray nozzles.”

Pelican’s motion for reconsideration of the disputed term “jet spray nozzles” is granted in part and otherwise denied. This court withdraws its previous construction of the term and replaces

it with the following construction: “devices or structures, submerged within the liquid mixture, with an aperture capable of providing a propulsion spray of the material passing through it.”

III. Conclusion

Wright’s motion to exclude the expert testimony of Dr. Karvelis and Steffe, (Docket Entry No. 86), is granted in part and denied in part. Dr. Karvelis may not provide technical-expert testimony at trial. Steffe may provide expert testimony at trial, but limited to Patent Office practices and procedures generally. Pelican’s motion to exclude the expert testimony of Dr. King, (Docket Entry No. 88), is denied, but without prejudice to reassertion following a *Daubert* evidentiary hearing. That hearing is scheduled for **August 6, 2012, at 8:30 a.m.**, in Courtroom 11-B. Pelican’s motion for reconsideration of the terms “middle portion” and “bottom portion,” (Docket Entry No. 94), is denied. The court adheres to its prior construction of those terms. Pelican’s motion for reconsideration of the term “jet spray nozzles,” (Docket Entry No. 95), is granted in part and otherwise denied. The revised construction of that term is as follows: “devices or structures, submerged within the liquid mixture, with an aperture capable of providing a propulsion spray of the material passing through it.”

SIGNED on May 29, 2012, at Houston, Texas.



Lee H. Rosenthal
United States District Judge